

WHAT IS CLAIMED IS:

1. A method for manufacturing circuit devices comprising:

preparing a laminated plate by laminating a first
5 conductive film and a second conductive film via a third
conductive film;

forming a conductive wiring layer by etching said first
conductive film into a desirable pattern;

removing said third conductive film by use of said
10 conductive wiring layer as a mask;

covering front-surface portions of the second conductive
film exposed by removing said third conductive film, said
conductive wiring layer, and end faces of the third conductive
film with an insulating layer;

15 partially exposing said conductive wiring layer by
removing a part of said insulating layer;

fixedly fitting semiconductor elements onto said
insulating layer and electrically connecting said
semiconductor elements with said conductive wiring layer;

20 covering said semiconductor elements with a sealing
resin layer; and

removing said second conductive film to expose said third
conductive film on the rear surface.

2. The method for manufacturing circuit devices as set forth in Claim 1, wherein

said conductive wiring layer is formed by performing etching up to said third conductive film.

5 3. The method for manufacturing circuit devices as set forth in Claim 2, wherein

a solution to etch said first conductive film is used.

4. The method for manufacturing circuit devices as set forth in Claim 2 or 3, wherein

10 as said solution for performing said etching, a solution containing ferric chloride or cupric chloride is used.

5. The method for manufacturing circuit devices as set forth in Claim 1, wherein

15 said third conductive film is removed by electrolytic peeling.

6. The method for manufacturing circuit devices as set forth in Claim 1, wherein

said third conductive film is removed by etching by use of a solution to etch said third conductive film.

20 7. The method for manufacturing circuit devices as set forth in Claim 6, wherein

said solution is an iodine-based solution.

8. The method for manufacturing circuit devices as set

forth in Claim 1, wherein

said second conductive film is entirely etched.

9. The method for manufacturing circuit devices as set forth in Claim 1, wherein

5 said second conductive film is formed thicker than said first conductive film.

10. The method for manufacturing circuit devices as set forth in Claim 1, wherein

 said insulating layer can be a thermoplastic resin, a
10 thermosetting resin, or a photosensitive resin.

11. The method for manufacturing circuit devices as set forth in Claim 1, wherein

 said first conductive film and said second conductive film are metals made of copper as a main material, and said
15 third conductive film is a metal made of silver as a main material.

12. The method for manufacturing circuit devices as set forth in Claim 1, wherein

 said laminated plate is manufactured by laminating said
20 third conductive film and said first conductive film by electroplating while using said second conductive film as a base.

13. The method for manufacturing circuit devices as set

forth in Claim 1, wherein

said laminated plate is formed by rolling.

14. The method for manufacturing circuit devices as set forth in Claim 1, wherein

5 said exposed and plated first conductive film parts and electronic components, excluding semiconductor elements, are electrically connected.

15. The method for manufacturing circuit devices as set forth in Claim 1, wherein

10 said insulating layer is formed by vacuum press or vacuum lamination.

16. The method for manufacturing circuit devices as set forth in Claim 1, wherein

15 said insulating layer is partially removed by laser processing.

17. The method for manufacturing circuit devices as set forth in Claim 1, wherein

said insulating layer is partially removed by a lithographic method.

20 18. The method for manufacturing circuit devices as set forth in Claim 1, wherein

by electrolytic plating using said second conductive layer as an electrode, a plated layer is formed on the exposed

parts of said conductive wiring layer.